REMARKS

Claims 1, 3, 5-6, 9-14, 18 and 20 are pending in this application. Claims 1, 11 and 12 are independent claims. Claims 2, 4, 7, 8, 15-17, and 19 are cancelled without any intent of prejudice to or disclaimer of the subject matter contained therein. Reconsideration and allowance of the present application are respectfully requested.

Statement Under 37 C.F.R. §1.133(b)

In response to the telephonic interview conducted January 13, 2009 and the Interview Summary dated January 16, 2009, Applicants wish to thank the Examiner for the courtesies extended during the interview. Applicants submit the following discussion to provide a complete record of the issues discussed during the Examiner Interview.

Applicants and the Examiner discussed the proposed claim 1 amendment "mapping the composite transport channel onto a physical channel at a radio frame corresponding to the TTI of the formed composite transport channel." Applicants argued that U.S. Patent App. Pub. 2002/0122400 A1 to Vayanos et al. ("Vayanos") does not teach or suggest said feature because Vayanos discloses mapping a plurality of transport channels into one channel (CCTrCH), but does not disclose that the CCTrCH is (1) mapped into a physical channel, or (2) that the mapped physical channel is at a radio frame size corresponding to a transport channel. (See Vayanos paras. [0028]-[0029].) The Examiner maintained the rejection, finding that the proposed amendment, by itself, would not be sufficient to overcome the current rejection.

Applicants also argued that Vayanos does not disclose the "scheduled transmission mode", "an autonomous transmission mode," of claim 1 because a scheduled transmission mode and an autonomous transmission mode do not read

on any of the priority schemes in Vayanos. The Examiner maintained that Vayanos discloses these features of claim 1 as currently pending, but suggested that further defining features "a scheduled transmission mode," and "an autonomous transmission mode" would aid in overcoming the current rejection.

At the conclusion of the interview, the Examiner suggested adding the proposed "radio frame" feature discussed above; (2) further defining "scheduled transmission mode" and "autonomous transmission mode"; and (3) adding the feature of dependent claim 7 to independent claim 1 to overcome the current rejection. In view of the above-discussed interview, independent claims 1, 11, and 12 have been amended in accordance with the Examiner's suggestions. No other pertinent matters were discussed.

Rejections under 35 U.S.C. §103

Claims 1, 3-14 and 18-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Vayanos in view of U.S. Patent App. Pub. 2006/0098655 A1 to Zeira et al. ("Zeira"). This rejection is respectfully traversed as follows.

Amended claim 1 requires, *inter alia*, "a scheduled transmission mode <u>in</u> which both a time and rate of transmission for transmission by the user equipment is determined based on a received instruction from a base station, and an autonomous transmission mode <u>in</u> which only the rate of transmission for transmission by the user equipment is limited by the received instruction from the <u>base station</u>." At least this feature is not taught or suggested by Vayanos, Zeira, and/or a combination of thereof.

Vayanos discloses an apparatus for allocating data streams given transmission time interval (TTI) constraints. The apparatus includes a multiplexer module 48 that multiplexes separate data streams (40, 42, 44, and 46) into a single transport stream 50. (Vayanos para. [0028].) Each of the data streams (40, 42,

44, and 46) has a <u>priority</u>. (<u>Id.</u> at para. [0029].) The priority scheme may be first-in-first-out (FIFO), last-in-last-out (LIFO), shortest job first (SJF), and type of data. (<u>Id.</u> at para. [0031].) Vayanos does not prioritize data streams based on instructions received from a base station.

The Examiner argues that the priority schemes in Vayanos constitutes "scheduled transmission mode" and "autonomous transmission mode" recited in However, the priority schemes in Vayanos are not scheduled or claim 1. autonomous transmission modes for a transport channel. More specifically, the priority scheme of the data streams in Vayanos are organized based on an order that streams are received (FIFO and LIFO), data size (SJF), and type of data. In contrast, the scheduled transmission mode recited in claim 1 is a mode in which both a time and rate of transmission for transmission by the user equipment is determined based on a received instruction from a base station. schemes in Vayanos do not determine both time and rate for transmission based on any instruction from a base station. Also, the autonomous transmission mode recited in claim 1 is a mode in which only the rate of transmission for transmission by the user equipment is limited by the received instruction from the base station. The priority schemes in Vayanos (FIFO, LIFO, SJF, and type of data) do not limit a rate of transmission, let alone, limit a rate of transmission based on a rate limit from a base station. Therefore, Vayanos does not disclose the autonomous transmission mode of claim 1.

Furthermore, Zeira does not make up for the above discussed deficiencies of Vayanos. Specifically, the transport channels (A, B, C) are not generated for a plurality of transmission modes, including a scheduled transmission mode, and an autonomous transmission mode as required by claim 1. Because neither Vayanos nor Zeira discloses the above-noted features, Vayanos in view of Zeira fails to render claim 1 obvious.

Applicants further submit that dependent claims 3, 5-7, 9, and 10 are allowable at least by virtue of their dependency from claim 1. Independent claims 11 and 12 and dependent claims 13, 14, 18, and 20 (depending on claim 12), are allowable for at least reasons somewhat similar to those set forth above with regard to claim 1. Therefore, Applicants respectfully requests that this art grounds of rejection of these claims under 35 U.S.C. § 103 be withdrawn.

CONCLUSION

In view of the above remarks and amendments, Applicants respectfully submit that each of the rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

Gary D. Yacura, Reg. No. 35,416

P.O. Box 8910

Reston, Virginia 20195

(703) 668-8000

GDY/AMW/JJH/ame